## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the above-identified application.

## **Listing of Claims**

- (Currently amended) A method of performing cascaded replication comprising:
   <u>asynchronously</u> replicating data to be written to a data volume of a first node to a data
   volume of a second node; and
  - replicating data to be written to said data volume of said second node to a data volume of a third node, wherein,
    - at least one of said replicating data to be written to said data volume of said first node to said data volume of said second node and said replicating data to be written to said data volume of said second node to said data volume of said third node comprises asynchronously replicating data said replicating data to be written to said data volume of said second node comprises periodically replicating said data to be written to said data volume of said second node.
- 2. (Cancelled)
- 3. (Currently Amended) The method of claim 2 A method of performing cascaded replication comprising:
  - asynchronously replicating data to be written to a data volume of a first node to a data

    volume of a second node; and
  - replicating data to be written to said data volume of said second node to a data volume of a third node,
  - wherein said replicating data to be written to said data volume of said second node comprises asynchronously replicating said data to be written to said data volume of said second node to said data volume of said third node.
- 4. (Cancelled)

- 5: (Currently Amended) The method of claim 2 3, wherein,
  said asynchronously replicating data to be written to said data volume of said first node
  comprises, asynchronously replicating data to be written to a data volume of a
  primary node to a data volume of an intermediate node; and
  said asynchronously replicating data to be written to said data volume of said second
  node comprises, asynchronously replicating data to be written to said data volume
  of said intermediate node to a data volume of a secondary node.
- 6. (Currently Amended) The method of claim 5, wherein said <u>asynchronously</u> replicating data to be written to said data volume of said intermediate node comprises <u>asynchronously</u> replicating data to be written to said data volume of said intermediate node to a data volume of each of a plurality of secondary nodes.
- 7. (Currently Amended) The method of claim 2 3, wherein, said asynchronously replicating data to be written to said data volume of said first node comprises asynchronously replicating data to be written to said data volume of said first node to said data volume of said second node using a first data link coupled between said first node and said second node;
  - said <u>asynchronously</u> replicating data to be written to said data volume of said second node comprises <u>asynchronously</u> replicating data to be written to said data volume of said second node to said data volume of said third node using a second data link coupled between said second node and said third node; and said first data link has a higher bandwidth than said second data link.

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- 8. (Currently Amended) An apparatus <del>configured to perform cascaded replication</del> comprising:
  - means a first device for asynchronously replicating data to be written to a data volume of a first node to a data volume of a second node; and
  - means a second device for replicating data to be written to said data volume of said second node to a data volume of a third node, wherein,
    - at least one of said means for replicating data to be written to said data volume of said first node to said data volume of said second node and said means for replicating data to be written to said data volume of said second node to said data volume of said third node comprises means for asynchronously replicating data said second device for replicating data to be written to said data volume of said second node comprises a device for periodically replicating said data to be written to said data volume of said second node to said data volume of said third node.
- 9. (Cancelled)
- 10. (Currently Amended) The apparatus of claim 9 An apparatus configured to perform cascaded replication comprising:
  - a first device for asynchronously replicating data to be written to a data volume of a first node to a data volume of a second node; and
  - a second device for replicating data to be written to said data volume of said second node
    to a data volume of a third node, wherein said means second device for replicating
    data to be written to said data volume of said second node comprises means a
    device for asynchronously replicating said data to be written to said data volume
    of said second node to said data volume of said third node.
- 11. (Cancelled)

- 12. (Currently Amended) The apparatus of claim 9 10, wherein, said means first device for asynchronously replicating data to be written to said data volume of said first node comprises,
  - means a device for asynchronously replicating data to be written to a data volume of a primary node to a data volume of an intermediate node; and said means second device for asynchronously replicating data to be written to said data volume of said second node comprises,
    - means a device for asynchronously replicating data to be written to said data volume of said intermediate node to a data volume of a secondary node.
- 13. (Currently Amended) The apparatus of claim 12, wherein said means device for asynchronously replicating data to be written to said data volume of said intermediate node comprises means a device for asynchronously replicating data to be written to said data volume of said intermediate node to a data volume of each of a plurality of secondary nodes.
- 14. (Currently Amended) The apparatus of claim 9 10, wherein, said means first device for asynchronously replicating data to be written to said data volume of said first node comprises means a device for asynchronously replicating data to be written to said data volume of said first node to said data volume of said second node using a first data link coupled between said first node and said second node;
  - said means for <u>asynchronously</u> replicating data to be written to said data volume of said second node comprises <u>means</u> a <u>device</u> for <u>asynchronously</u> replicating data to be written to said data volume of said second node to said data volume of said third node using a second data link coupled between said second node and said third node; and

said first data link has a higher bandwidth than said second data link.

- 15. (Currently Amended) A <u>set of machine-readable medium mediums collectively</u> having a plurality of instructions executable by a <u>machine embodied therein two or more machines</u>, wherein said plurality of instructions when executed cause said <u>machine two or more machines</u> to perform a method comprising:
  - asynchronously replicating data to be written to a data volume of a first node to a data volume of a second node; and
  - replicating data to be written to said data volume of said second node to a data volume of a third node, wherein,
    - at least one of said replicating data to be written to said data volume of said first node to said data volume of said second node and said replicating data to be written to said data volume of said second node to said data volume of said third node comprises asynchronously replicating data said replicating data to be written to said data volume of said second node comprises periodically replicating said data to be written to said data volume of said second node to said data volume of said third node..
- 16. (Cancelled)
- 17. (Currently Amended) The machine readable medium of claim 16, A set of machine-readable medium mediums collectively having a plurality of instructions executable by two or more machines, wherein said plurality of instructions when executed cause said two or more machines to perform a method comprising:
  - asynchronously replicating data to be written to a data volume of a first node to a data volume of a second node; and
  - replicating data to be written to said data volume of said second node to a data volume of a third node,
  - wherein said replicating data to be written to said data volume of said second node comprises asynchronously replicating said data to be written to said data volume of said second node to said data volume of said third node.

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18. (Cancelled)

- 19. (Currently Amended) The <u>set of machine-readable medium mediums</u> of claim 16 17, wherein,
  - said <u>asynchronously</u> replicating data to be written to said data volume of said first node comprises,
    - replicating data to be written to a data volume of a primary node to a data volume of an intermediate node; and
  - said <u>asynchronously</u> replicating data to be written to said data volume of said second node comprises,
    - <u>asynchronously</u> replicating data to be written to said data volume of said intermediate node to a data volume of a secondary node.
- 20. (Currently Amended) The <u>set of machine-readable medium mediums</u> of claim 19, wherein said <u>asynchronously</u> replicating data to be written to said data volume of said intermediate node comprises <u>asynchronously</u> replicating data to be written to said data volume of said intermediate node to a data volume of each of a plurality of secondary nodes.
- 21. (Currently Amended) The <u>set of machine-readable medium mediums</u> of claim 16 17, wherein,
  - said <u>asynchronously</u> replicating data to be written to said data volume of said first node comprises <u>asynchronously</u> replicating data to be written to said data volume of said first node to said data volume of said second node using a first data link coupled between said first node and said second node;
  - said <u>asynchronously</u> replicating data to be written to said data volume of said second node comprises <u>asynchronously</u> replicating data to be written to said data volume of said second node to said data volume of said third node using a second data link coupled between said second node and said third node; and said first data link has a higher bandwidth than said second data link.

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## 22.-25 (Cancelled)